

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/537,512
Source: PG/10
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RAW SEQUENCE LISTING

DATE: 06/14/2005

PATENT APPLICATION: US/10/537,512

TIME: 09:05:02

Input Set : A:\53529-5007-02-US Sequence Listing.txt

Output Set: N:\CRF4\06142005\J537512.raw

3 <110> APPLICANT: LYNCH, Berkley
 4 NOCKA, Karl
 5 FUKS, Bruno
 7 <120> TITLE OF INVENTION: Methods for the identification of agents for the treatment
 of seizures, neurological diseases, endocrinopathies and hormonal
 9 diseases
 11 <130> FILE REFERENCE: 53529-5007-02-US
C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/537,512
C--> 13 <141> CURRENT FILING DATE: 2005-06-03
 13 <150> PRIOR APPLICATION NUMBER: PCT/US2003/038122
 14 <151> PRIOR FILING DATE: 2003-12-02
 16 <150> PRIOR APPLICATION NUMBER: US 60/430,372
 17 <151> PRIOR FILING DATE: 2002-12-03
 19 <150> PRIOR APPLICATION NUMBER: US 60/506,764
 20 <151> PRIOR FILING DATE: 2003-09-30
 22 <160> NUMBER OF SEQ ID NOS: 16
 24 <170> SOFTWARE: PatentIn version 3.3
 26 <210> SEQ ID NO: 1
 27 <211> LENGTH: 2229
 28 <212> TYPE: DNA
 29 <213> ORGANISM: Homo sapiens
 32 <220> FEATURE:
 33 <221> NAME/KEY: CDS
 34 <222> LOCATION: (1)..(2229)
 36 <400> SEQUENCE: 1
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 38 Met Glu Glu Gly Phe Arg Asp Arg Ala Ala Phe Ile Arg Gly Ala Lys
 39 1 5 10 15
 41 gac att gct aag gaa gtc aaa aag cat gcg gcc aag aag gtg gtg aag 96
 42 Asp Ile Ala Lys Glu Val Lys Lys His Ala Ala Lys Lys Val Val Lys
 43 20 25 30
 45 ggc ctg gac aga gtc cag gac gaa tat tcc cga aga tcg tac tcc cgc 144
 46 Gly Leu Asp Arg Val Gln Asp Glu Tyr Ser Arg Arg Ser Tyr Ser Arg
 47 35 40 45
 49 ttt gag gag gag gat gat gat gac ttc cct gct ccc agt gat ggt 192
 50 Phe Glu Glu Asp Asp Asp Asp Phe Pro Ala Pro Ser Asp Gly
 51 50 55 60
 53 tat tac cga gga gaa ggg acc cag gat gag gag gaa ggt gca tcc 240
 54 Tyr Tyr Arg Gly Glu Gly Thr Gln Asp Glu Glu Gly Gly Ala Ser
 55 65 70 75 80
 57 agt gat gct act gag ggc cat gac gag gat gat gag atc tat gaa ggg 288
 58 Ser Asp Ala Thr Glu Gly His Asp Glu Asp Asp Glu Ile Tyr Glu Gly
 59 85 90 95

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61 gaa tat cag ggc att ccc cg ^g gca gag tct ggg ggc aaa ggc gag cg ^g	336
62 Glu Tyr Gln Gly Ile Pro Arg Ala Glu Ser Gly Gly Lys Gly Glu Arg	
63 100 105 110	
65 atg gca gat ggg gc ^g ccc ctg gct gga gta agg ggg ggc ttg agt gat	384
66 Met Ala Asp Gly Ala Pro Leu Ala Gly Val Arg Gly Gly Leu Ser Asp	
67 115 120 125	
69 ggg gag ggt ccc cct ggg gc ^g cg ^g ggg gag gca caa cga cg ^g aaa gaa	432
70 Gly Glu Gly Pro Pro Gly Gly Arg Gly Glu Ala Gln Arg Arg Lys Glu	
71 130 135 140	
73 cga gaa gaa ctg gcc caa cag tat gaa gcc atc cta cg ^g gag tgt ggc	480
74 Arg Glu Glu Leu Ala Gln Gln Tyr Glu Ala Ile Leu Arg Glu Cys Gly	
75 145 150 155 160	
77 cac ggc cgc ttc cag tgg aca ctg tat ttt gtg ctt ggt ctg gc ^g ctg	528
78 His Gly Arg Phe Gln Trp Thr Leu Tyr Phe Val Leu Gly Leu Ala Leu	
79 165 170 175	
81 atg gct gac ggt gtg gag gtc ttt gtg gtg ggc ttc gtg ctg ccc agc	576
82 Met Ala Asp Gly Val Glu Val Phe Val Val Gly Phe Val Leu Pro Ser	
83 180 185 190	
85 gct gag aaa gac atg tgc ctg tcc gac tcc aac aaa ggc atg cta ggc	624
86 Ala Glu Lys Asp Met Cys Leu Ser Asp Ser Asn Lys Gly Met Leu Gly	
87 195 200 205	
89 ctc atc gtc tac ctg ggc atg atg gtg gga gcc ttc ctc tgg gga ggt	672
90 Leu Ile Val Tyr Leu Gly Met Met Val Gly Ala Phe Leu Trp Gly Gly	
91 210 215 220	
93 ctg gct gac cg ^g ctg ggt cg ^g agg cag tgt ctg ctc atc tcg ctc tca	720
94 Leu Ala Asp Arg Leu Gly Arg Arg Gln Cys Leu Leu Ile Ser Leu Ser	
95 225 230 235 240	
97 gtc aac agc gtc ttc gcc ttc ttc tca tct ttt gtc cag ggt tac ggc	768
98 Val Asn Ser Val Phe Ala Phe Phe Ser Ser Phe Val Gln Gly Tyr Gly	
99 245 250 255	
101 act ttc ctc ttc tgc cg ^g cta ctt tct ggg gtt ggg att gga ggg tcc	816
102 Thr Phe Leu Phe Cys Arg Leu Leu Ser Gly Val Gly Ile Gly Gly Ser	
103 260 265 270	
105 atc ccc att gtc ttc tcc tat ttc tcc gag ttt ctg gcc cag gag aaa	864
106 Ile Pro Ile Val Phe Ser Tyr Phe Ser Glu Phe Leu Ala Gln Glu Lys	
107 275 280 285	
109 cga ggg gag cat ttg agc tgg ctc tgc atg ttt tgg atg att ggt ggc	912
110 Arg Gly Glu His Leu Ser Trp Leu Cys Met Phe Trp Met Ile Gly Gly	
111 290 295 300	
113 gtg tac gca gct gct atg gcc tgg gcc atc atc ccc cac tat ggg tgg	960
114 Val Tyr Ala Ala Ala Met Ala Trp Ala Ile Ile Pro His Tyr Gly Trp	
115 305 310 315 320	
117 agt ttt cag atg ggt tct gcc tac cag ttc cac agc tgg agg gtc ttc	1008
118 Ser Phe Gln Met Gly Ser Ala Tyr Gln Phe His Ser Trp Arg Val Phe	
119 325 330 335	
121 gtc ctc gtc tgc gcc ttt cct tct gtg ttt gcc att ggg gct ctg acc	1056
122 Val Leu Val Cys Ala Phe Pro Ser Val Phe Ala Ile Gly Ala Leu Thr	
123 340 345 350	
125 acg cag cct gag agc ccc cgt ttc cta gag aat gga aag cat gat	1104

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126	Thr	Gln	Pro	Glu	Ser	Pro	Arg	Phe	Phe	Leu	Glu	Asn	Gly	Lys	His	Asp	
127			355					360					365				
129	gag	gcc	tgg	atg	gtg	ctg	aag	cag	gtc	cat	gat	acc	aac	atg	cga	gcc	
130	Glu	Ala	Trp	Met	Val	Leu	Lys	Gln	Val	His	Asp	Thr	Asn	Met	Arg	Ala	
131			370					375				380					
133	aaa	gga	cat	cct	gag	cga	gtg	ttc	tca	gta	acc	cac	att	aag	acc	att	
134	Lys	Gly	His	Pro	Glu	Arg	Val	Phe	Ser	Val	Thr	His	Ile	Lys	Thr	Ile	
135	385				390					395				400			
137	cat	cag	gag	gat	gaa	ttg	att	gag	atc	cag	tcg	gac	aca	ggg	acc	tgg	
138	His	Gln	Glu	Asp	Glu	Leu	Ile	Glu	Ile	Gln	Ser	Asp	Thr	Gly	Thr	Trp	
139						405				410				415			
141	tac	cag	cgc	tgg	ggg	gtc	cgg	gcc	ttg	agc	cta	ggg	ggg	cag	gtt	tgg	
142	Tyr	Gln	Arg	Trp	Gly	Val	Arg	Ala	Leu	Ser	Leu	Gly	Gly	Gln	Val	Trp	
143						420			425				430				
145	ggg	aat	ttt	ctc	tcc	tgt	ttt	ggt	ccc	gaa	tat	cg	cgc	atc	act	ctg	
146	Gly	Asn	Phe	Leu	Ser	Cys	Phe	Gly	Pro	Glu	Tyr	Arg	Arg	Ile	Thr	Leu	
147						435			440			445					
149	atg	atg	atg	ggt	gtg	tgg	ttc	acc	atg	tca	ttc	agc	tac	tat	ggc	ctg	
150	Met	Met	Met	Gly	Val	Trp	Phe	Thr	Met	Ser	Phe	Ser	Tyr	Tyr	Gly	Leu	
151						450			455			460					
153	acc	gtc	tgg	ttt	cct	gac	atg	atc	cgc	cat	ctc	cag	gca	gtg	gac	tac	
154	Thr	Val	Trp	Phe	Pro	Asp	Met	Ile	Arg	His	Leu	Gln	Ala	Val	Asp	Tyr	
155						465			470			475			480		
157	gca	tcc	cgc	acc	aaa	gtg	ttc	ccc	ggg	gag	cgc	gta	gag	cat	gta	act	
158	Ala	Ser	Arg	Thr	Lys	Val	Phe	Pro	Gly	Glu	Arg	Val	Glu	His	Val	Thr	
159						485				490			495				
161	ttt	aac	ttc	acg	ttg	gag	aat	cag	atc	cac	cga	ggc	ggg	cag	tac	ttc	
162	Phe	Asn	Phe	Thr	Leu	Glu	Asn	Gln	Ile	His	Arg	Gly	Gly	Gln	Tyr	Phe	
163						500			505			510					
165	aat	gac	aag	ttc	att	ggg	ctg	cgg	ctc	aag	tca	gtg	tcc	ttt	gag	gt	
166	Asn	Asp	Lys	Phe	Ile	Gly	Leu	Arg	Leu	Lys	Ser	Val	Ser	Phe	Glu	Asp	
167						515			520			525					
169	tcc	ctg	ttt	gaa	gag	tgt	tat	ttt	gag	gat	gtc	aca	tcc	agc	aac	acg	
170	Ser	Leu	Phe	Glu	Glu	Cys	Tyr	Phe	Glu	Asp	Val	Thr	Ser	Ser	Asn	Thr	
171						530			535			540					
173	ttt	ttc	cgc	aac	tgc	aca	ttc	atc	aac	act	gtg	ttc	tat	aac	act	gac	
174	Phe	Phe	Arg	Asn	Cys	Thr	Phe	Ile	Asn	Thr	Val	Phe	Tyr	Asn	Thr	Asp	
175						545			550			555			560		
177	ctg	ttc	gag	tac	aag	ttt	gtg	aac	agc	cgt	ctg	ata	aac	agt	aca	ttc	
178	Leu	Phe	Glu	Tyr	Lys	Phe	Val	Asn	Ser	Arg	Leu	Ile	Asn	Ser	Thr	Phe	
179						565			570			575					
181	ctg	cac	aac	aag	gag	ggc	tgc	ccg	cta	gac	gtg	aca	ggg	acg	ggc	gaa	
182	Leu	His	Asn	Lys	Glu	Gly	Cys	Pro	Leu	Asp	Val	Thr	Gly	Thr	Gly	Glu	
183						580			585			590					
185	ggt	gcc	tac	atg	gt	ta	tt	gt	agc	ttc	ctg	ggg	aca	ctg	gca	gt	
186	Gly	Ala	Tyr	Met	Val	Tyr	Phe	Val	Ser	Phe	Leu	Gly	Thr	Leu	Ala	Val	
187						595			600			605					
189	ctt	cct	ggg	aat	atc	gt	tg	tct	gcc	ctg	ctc	atg	gac	aag	atc	ggc	agg
190	Leu	Pro	Gly	Asn	Ile	Val	Ser	Ala	Leu	Leu	Met	Asp	Lys	Ile	Gly	Arg	

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191	610	615	620															
193	ctc	aga	atg	1920														
194	Leu	Arg	Met	Leu	Ala	Gly	Ser	Ser	Val	Met	Ser	Cys	Val	Ser	Cys	Phe		
195	625			630			635				640							
197	tgc	ctg	tct	ttt	ggg	aac	agt	gag	tcg	gcc	atg	atc	gct	ctg	ctc	tgc	1968	
198	Phe	Leu	Ser	Phe	Gly	Asn	Ser	Glu	Ser	Ala	Met	Ile	Ala	Leu	Leu	Cys		
199					645				650				655					
201	ctt	ttt	ggc	ggg	gtc	agc	att	gca	tcc	tgg	aat	gcg	ctg	gac	gtg	ttg	2016	
202	Leu	Phe	Gly	Gly	Val	Ser	Ile	Ala	Ser	Trp	Asn	Ala	Leu	Asp	Val	Leu		
203					660			665			670							
205	act	gtt	gaa	ctc	tac	ccc	tca	gac	aag	agg	acc	aca	gct	ttt	ggc	tcc	2064	
206	Thr	Val	Glu	Leu	Tyr	Pro	Ser	Asp	Lys	Arg	Thr	Thr	Ala	Phe	Gly	Phe		
207					675			680			685							
209	ctg	aat	gcc	ctg	tgt	aag	ctg	gca	gct	gtg	ctg	ggg	atc	agc	atc	tcc	2112	
210	Leu	Asn	Ala	Leu	Cys	Lys	Leu	Ala	Ala	Val	Leu	Gly	Ile	Ser	Ile	Phe		
211					690			695			700							
213	aca	tcc	tcc	gtg	gga	atc	acc	aag	gct	gca	ccc	atc	ctc	ttt	gcc	tca	2160	
214	Thr	Ser	Phe	Val	Gly	Ile	Thr	Lys	Ala	Ala	Pro	Ile	Leu	Phe	Ala	Ser		
215					705			710			715					720		
217	gct	gcc	ctt	gcc	ctt	ggc	agc	tct	ctg	gcc	ctg	aag	ctg	cct	gag	acc	2208	
218	Ala	Ala	Leu	Ala	Leu	Gly	Ser	Ser	Leu	Ala	Leu	Lys	Leu	Pro	Glu	Thr		
219					725				730			735						
221	cgg	ggg	cag	gtg	ctg	cag	tga										2229	
222	Arg	Gly	Gln	Val	Leu	Gln												
223				740														
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234	1			5				10				15						
237	Asp	Ile	Ala	Lys	Glu	Val	Lys	Lys	His	Ala	Ala	Lys	Lys	Val	Val	Lys		
238				20				25			30							
241	Gly	Leu	Asp	Arg	Val	Gln	Asp	Glu	Tyr	Ser	Arg	Arg	Ser	Tyr	Ser	Arg		
242				35				40			45							
245	Phe	Glu	Glu	Asp	Asp	Asp	Asp	Asp	Phe	Pro	Ala	Pro	Ser	Asp	Gly			
246				50				55			60							
249	Tyr	Tyr	Arg	Gly	Glu	Gly	Thr	Gln	Asp	Glu	Glu	Glu	Gly	Gly	Ala	Ser		
250				65				70			75			80				
253	Ser	Asp	Ala	Thr	Glu	Gly	His	Asp	Glu	Asp	Asp	Glu	Ile	Tyr	Glu	Gly		
254					85				90			95						
257	Glu	Tyr	Gln	Gly	Ile	Pro	Arg	Ala	Glu	Ser	Gly	Gly	Lys	Gly	Glu	Arg		
258					100				105			110						
261	Met	Ala	Asp	Gly	Ala	Pro	Leu	Ala	Gly	Val	Arg	Gly	Gly	Leu	Ser	Asp		
262				115				120			125							
265	Gly	Glu	Gly	Pro	Pro	Gly	Gly	Arg	Gly	Glu	Ala	Gln	Arg	Arg	Lys	Glu		
266				130				135			140							
269	Arg	Glu	Glu	Leu	Ala	Gln	Gln	Tyr	Glu	Ala	Ile	Leu	Arg	Glu	Cys	Gly		

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270 145          150          155          160
273 His Gly Arg Phe Gln Trp Thr Leu Tyr Phe Val Leu Gly Leu Ala Leu
274           165          170          175
277 Met Ala Asp Gly Val Glu Val Phe Val Val Gly Phe Val Leu Pro Ser
278           180          185          190
281 Ala Glu Lys Asp Met Cys Leu Ser Asp Ser Asn Lys Gly Met Leu Gly
282           195          200          205
285 Leu Ile Val Tyr Leu Gly Met Met Val Gly Ala Phe Leu Trp Gly Gly
286           210          215          220
289 Leu Ala Asp Arg Leu Gly Arg Arg Gln Cys Leu Leu Ile Ser Leu Ser
290           225          230          235          240
293 Val Asn Ser Val Phe Ala Phe Phe Ser Ser Phe Val Gln Gly Tyr Gly
294           245          250          255
297 Thr Phe Leu Phe Cys Arg Leu Leu Ser Gly Val Gly Ile Gly Gly Ser
298           260          265          270
301 Ile Pro Ile Val Phe Ser Tyr Phe Ser Glu Phe Leu Ala Gln Glu Lys
302           275          280          285
305 Arg Gly Glu His Leu Ser Trp Leu Cys Met Phe Trp Met Ile Gly Gly
306           290          295          300
309 Val Tyr Ala Ala Ala Met Ala Trp Ala Ile Ile Pro His Tyr Gly Trp
310           305          310          315          320
313 Ser Phe Gln Met Gly Ser Ala Tyr Gln Phe His Ser Trp Arg Val Phe
314           325          330          335
317 Val Leu Val Cys Ala Phe Pro Ser Val Phe Ala Ile Gly Ala Leu Thr
318           340          345          350
321 Thr Gln Pro Glu Ser Pro Arg Phe Phe Leu Glu Asn Gly Lys His Asp
322           355          360          365
325 Glu Ala Trp Met Val Leu Lys Gln Val His Asp Thr Asn Met Arg Ala
326           370          375          380
329 Lys Gly His Pro Glu Arg Val Phe Ser Val Thr His Ile Lys Thr Ile
330           385          390          395          400
333 His Gln Glu Asp Glu Leu Ile Glu Ile Gln Ser Asp Thr Gly Thr Trp
334           405          410          415
337 Tyr Gln Arg Trp Gly Val Arg Ala Leu Ser Leu Gly Gly Gln Val Trp
338           420          425          430
341 Gly Asn Phe Leu Ser Cys Phe Gly Pro Glu Tyr Arg Arg Ile Thr Leu
342           435          440          445
345 Met Met Met Gly Val Trp Phe Thr Met Ser Phe Ser Tyr Tyr Gly Leu
346           450          455          460
349 Thr Val Trp Phe Pro Asp Met Ile Arg His Leu Gln Ala Val Asp Tyr
350           465          470          475          480
353 Ala Ser Arg Thr Lys Val Phe Pro Gly Glu Arg Val Glu His Val Thr
354           485          490          495
357 Phe Asn Phe Thr Leu Glu Asn Gln Ile His Arg Gly Gly Gln Tyr Phe
358           500          505          510
361 Asn Asp Lys Phe Ile Gly Leu Arg Leu Lys Ser Val Ser Phe Glu Asp
362           515          520          525
365 Ser Leu Phe Glu Glu Cys Tyr Phe Glu Asp Val Thr Ser Ser Asn Thr
366           530          535          540

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L:13 M:270 C: Current Application Number differs, Replaced Current Application No
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date